



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/423,414	12/23/1999	GRAHAM THOMAS SMITH	P150299	6705

22839 7590 04/07/2004

RICHES, MCKENZIE & HERBERT, LLP
SUITE 1800
2 BLOOR STREET EAST
TORONTO, ON M4W 3J5
CANADA

EXAMINER

ENG, GEORGE

ART UNIT PAPER NUMBER

2643

DATE MAILED: 04/07/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary

Application No.

09/423,414

Applicant(s)

SMITH ET AL.

Examiner

George Eng

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendment filed 12/15/2003 (paper no. 16).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-6, 8-16, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya (US PAT. 5,808,663) in view of Kuno (US PAT. 5,802,494).

Regarding claim 1, Okaya discloses a multimedia carousel (10), read as a teleconferencing robot, for use in video conferencing and multimedia presentation application

Art Unit: 2643

enabling a remote conferee to project a sense of presence into a group meeting, comprising a base (12) having an upper stage and a lower stage, wherein the lower and upper stages are rotatable relative to one another about a substantially vertical axis (A, figure 1), and a video monitor (16) is secured to the upper stage and the upper stage is rotatably mounted to the lower stage, the video monitor receiving and displaying an image of the remote conferee, a video camera (18) movably mount on the base (col. 2 line 48 through col. 4 line 7). Although Okaya teaches the video camera (18) is a voice-activated camera and the media unit (14) can be rotated to the base (12) to enable participants to ensure that particular participants are within the line of sight (col. 2 lines 65-67 and col. 3 line 65 through col. 4 line 3), Okaya differs from the claimed invention in not specifically teaching control means mount on the base for moving the video monitor secured to the upper stage and the video camera in response to an input control signal derived from a remote signal generated by the remote conferee so that the video monitor and video camera move in response to the input control signal to enable the remote conferee to project a sense of presence into the group meeting. However, Kuno teaches a monitoring system enabling a remote physician, i.e., a remote conferee, located at a remote monitor section (2, figure 1) to observe and communication with one or more subjects located at data acquiring section (1, figure 1), wherein data acquiring section comprises a robot (5, figure 4) including a display and a camera, and a control signal is supplied from the monitor section to the data acquiring section for moving the camera, as well as the display, in order to get a clearer image of the subjects (col. 3 lines 32-63 and col. 25 line 65 through col. 26 line 22). By combining Okaya and Kuno, the control means can move the video camera, as well as the video monitor, in response to the input control signal derived from a remote signal generated by the remote

Art Unit: 2643

conferee. Okaya and Kuno are combinable because they are in the same field of endeavor, i.e., to provide face-to-face conversation between two endpoints. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Okaya in having the control means for moving the video camera and the video monitor in response to the input control signal derived from the remote signal generated by the remote conferee, as per teaching of Kuno, in order to get a clearer image of the subject.

Regarding claims 2-3, Okaya teaches the video monitor capable of rotating relative to the base (col. 3 line 65 through col. 4 line 3). Although Okaya does not specifically teaches the control means including a rotating drive to remote the video monitor and video camera. However, Kuno teaches to move the robot (5, figure 4) and camera built in the robot in response to the remote signal (col. 26 lines 3-7 and col. 28 lines 21-40). Therefore, the combination of Okaya and Kuno teaches the claimed limitations.

Regarding claims 4-5, Okaya differs from the claimed invention in not specifically teaching control means including a pan drive unit for rotation of the video camera and a tilt drive unit for tilting the video camera upwards and downwards. However, Kuno teaches the camera built in the robot, wherein the robot, as well as the camera, is capable of being adjusted by the remote monitoring section to obtain a clearer image of the subject (col. 25 line 65 through col. 26 line 7 and col. 28 lines 11-40) so that it recognizes the control means comprising the pan drive unit and the tile drive unit. Therefore, the combination of Okaya and Kuno teaches the claimed limitations.

Regarding claim 6, Okaya teaches the video camera is a voice-activated video camera (col. 2 lines 65-67) so that the input control signal is optionally derived from sound source

Art Unit: 2643

detection means for driving the video camera and the video monitor to a particular direction in response to the control signal.

Regarding claim 8, Okaya discloses the base comprising an upper part on which the video monitor is mounted and a lower part and means for vertically displacing the upper and lower parts relative to one another (figure1).

Regarding claim 9, Kuno discloses the robot as shown in figure 27 comprising an upper part on which video monitor is mounted and a lower part, wherein the lower part comprises a mobile ground unit including wheels and drive motors for rotating the wheels (col. 29 lines 11-12).

Regarding claim 10, Okaya teaches the screen of the video monitor (16) is positioned at or near the vertical axis (A) about which the video monitor rotates such that an angle formed by two straight lines lying in a horizontal plane crossing at the vertical axis (col. 3 line 65 through col. 4 line 3). Although Okaya does not specifically teaching that that extending through left and right hand edges of the screen of the video monitor is substantially 160 to 200 degrees, Okaya teaches the rotation relative to the base to enable participants to get a better view. Thus, it would have been obviously to extend through left and right hand edges of the screen of the video monitor is substantially 160 to 200 degrees in order to enable participants to get a better view.

Regarding claims 11-12, Kuno teaches a patient monitoring system comprising a robot unit (5) including a camera and a display as shown in figure 4 for providing communication between a patient and a physician (col. 5 lines 17-25), wherein the robot further comprises arms and hands for providing visual message to a subject, i.e., swing the arms of the robot, in order to get attention (col. 23 line 64 through col. 24 line 4).

Art Unit: 2643

Regarding claim 13, Okaya teaches to use the multimedia carousel in conjunction with a remote teleconferencing unit for presentation of an outline at a meeting (col. 3 lines 43-65) such that the remote teleconferencing unit inherently comprising a second microphone and a second video camera for obtaining an audio signal and an image from the remote conferee for transmission to the video monitor of the teleconferencing robot, and a second video monitor and a second speaker for providing an image and an audio signal received from the multimedia carousel, wherein the video monitor of the multimedia carousel provided with a speaker for outputting an audio signal received from the microphone of the remote teleconferencing unit and the input control signal is provided by the remote teleconferencing unit.

Regarding claim 14, Okaya differs from the claimed invention in not specifically teaching to transmit data signals to the multimedia carousel for providing information on movement of the multimedia carousel. However, Kuno teaches to provide information on movement of the robot in order to make user friendly (col. 29 lines 1-65). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Okaya in transmitting data signals to the multimedia carousel for providing information on movement of the multimedia carousel, as per teaching of Kuno, because it makes user friendly so that the multimedia carousel is capable of being controlled remotely.

Regarding claim 15, Okaya teaches microphone array means for enabling a location of a speaker to be determined and generating a detection signal indicative of the location of the speaker (figure 2 and col. 3 lines 13-20).

Regarding claim 16, Kuno teaches a switch unit located at the monitor section (figure 5) enabling the input control signal to be selectively derived from the detection signal and a remote signal generated by the remote conferee (col. 28 lines 31-40 and col. 30 lines 48-60).

Regarding claim 18, Okaya teaches the video camera rotating substantially about the vertical axis (figure 1).

Regarding claim 21, the limitations of the claim are rejected as the same reasons set forth in claim 1.

4. Claims 7, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okaya (US PAT. 5,808,663) in view of Kuno (US PAT. 5,802,494) as applied to claim 3 above, and further in view of Hildin (US PAT. 5,844,599).

Regarding claim 7, the combination of Okaya and Kuno differs from the claimed invention in not specifically teaching a defined forward direction with the video monitor normally being directed in the defined forward direction. However, Hildin teaches to pan and tilt in a define direction and having position presets in order to automatically cycled to a defined forward direction if input control signal is non-active (col. 2 lines 4-15 and col. 4 lines 27-64). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Okaya and Kuno in having the defined forward direction at the upper stage, as per teaching of Hildin, in order to automatically cycled to the defined forward direction if input control signal is non-active, i.e., a default position.

Regarding claim 17, Okaya discloses the base supporting the video monitor, as well the camera and the microphones (figure 1). The combination of Okaya and Kuno differs from the

Art Unit: 2643

claimed invention in not specifically teaching the microphone array being fixed to the base such that the video camera and the video monitor rotate independently of the microphone array means. However, Hildin teaches the microphone array being fixed in a location so the video camera and the video monitor rotate independently of the microphone array means in order to correctly detect the position of a speaker (figure 1 and col. 5 line 52 through col. 6 line 63). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Okaya and Kuno in having the microphone array being fixed to the base, as per teaching of Hildin, because it improves the fidelity of voice signal in detecting the location of the speaker.

Regarding claim 19, the combination of Okaya and Kuno differs from the claimed invention in not specifically teaching location determining means for enabling a location of a person to be determined and generated a detection signal indicative of the location of the speaker, wherein the location determining means is fixed to the base. However, Hildin teaches location determining means for enabling a location of a person to be determined and generating a detection signal indicative of location of the speaker, wherein the video camera and the video monitor operate independently of the location determining means and the input control signal is derived from the detection signal and cause the rotating drive unit and pan drive unit to rotate to a position substantially facing the location of the speaker (col. 5 line 40 through col. 6 line 63). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Okaya and Kuno in having the location determining means, as per teaching of Hildin, because it improves the fidelity of voice signal in detecting the location of the speaker.

Response to Arguments

5. Applicant's arguments filed 12/15/2003 (paper no. 16) have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that neither Kuno nor Okaya teaches or suggest moving a video monitor connected to an upper stage of the base in response to remote control signals to project a sense of presence into the group meeting, Okaya clearly teaches a video monitor (14, figure 1) connected to an upper stage of the base to project a sense of presence into the group meeting (col. 2 line 48 through col. 4 line 7) and Kuno clearly teaches to generate remote control signals from a monitor section (2, figure 1) to a robot (5, figure 1) to operate the movements of the robot including moving the display of the robot, as well as the camera of the robot, in order to get a clearer image of the subject (col. 3 lines 32-63, col. 5 lines 17-30 and col. 25 line 65 through col. 26 line 22). Note the claimed language does not recite distinguishable subject matter in view of the applied references. Thus, the combination of Okaya and Kuno is enough to reject the claimed limitations.

Art Unit: 2643

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Okaya and Kuno are combinable because they are in the same field of endeavor, i.e., to provide face-to-face conversation between two endpoints. And the motivation is to provide control means for moving the video camera and the video monitor in response to the input control signal derived from the remote signal generated by the remote conferee, as per teaching of Kuno, in order to get a clearer image of the subject.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's arguments that neither Okaya nor Kuno teaches a rotating drive unit for rotation of the video monitor, Kuno teaches to move the robot (5, figure 4), i.e., the display of the robot, and camera built in the robot in response to the remote signal (col. 26 lines 3-7 and col. 28 lines 21-40) so that one skill in the art would recognize the robot obviously having a rotation drive unit for rotation of the robot, as well as the video monitor. Thus, the combination of Okaya and Kuno is enough to reject the claimed limitations.

In response to applicant's arguments that neither Okaya nor Kuno teaches to drive the video monitor to substantially face the detected direction of the sound source, Okaya clearly teaches the camera being a voice-activated video camera (col. 2 lines 65-67) so that the input control signal is optionally derived from sound source detection means for driving the camera to a particular direction in response to the control signal. Note Okaya also teaches the camera is attached to the monitor so that one skill in the art would recognize the monitor will be driven to substantially face of the detected direction derived from the sound source, i.e., the location of the speaker.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., moving up and down the upper part with respect to the lower part in a vertical direction) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that neither Okaya nor Kuno teaches the screen of the video monitor being positioned near the vertical axis about which the video monitor rotates, Okaya clearly discloses the video camera attached in the video monitor for rotating substantially about the vertical axis (figure 1) so that one skill in the art would recognize the screen of the video monitor being positioned near the vertical axis.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any response to this final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks

Washington D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

Art Unit: 2643

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


George Eng

Examiner

Art Unit 2643